



[57] Abstract

5 The present invention relates to a method and apparatus for  
separating particulate matter from a gaseous stream. According  
to the method, the gaseous stream containing the suspended  
particulates is passed into a separator apparatus which includes  
at least two multiple-inlet-multicyclones (16A – 16C), wherein  
10 the particulates are separated from the gas by centrifugal force.  
According to the invention, a separator apparatus is employed  
wherein at least two (16A – 16C) of the multiple-inlet cyclones  
are adapted to operate in parallel so as to form a multiple-inlet-  
multicyclone apparatus. The cyclone assembly according to the  
15 invention may be used as, e.g., the primary separator of an FCC  
unit, but more advantageously it serves as the secondary or  
tertiary separator of an FCC unit to remove “fines” from the flue  
gases of the preceding separation stages.

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As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one inventor is named below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

### PROCESS AND APPARATUS FOR SEPARATING SOLID SUBSTANCES FROM GASES

the specification of which is attached hereto. If not attached hereto,  
the specification was filed on February 8, 2001 \_\_\_\_\_ as  
United States Application Number 09/788,922 \_\_\_\_\_; and  
and amended on \_\_\_\_\_ (if applicable) and/or  
the specification was filed on \_\_\_\_\_ as PCT  
International Application Number \_\_\_\_\_; and was  
amended under PCT Article 19 on \_\_\_\_\_ (if applicable)

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Priority Claimed

<u>20000262</u>	<u>FINLAND</u>	<u>February 8, 2000</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
<u>          </u>	<u>          </u>	<u>          </u>	<input type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
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(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
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(Number)	(Country)	(Month/Day/Year Filed)	Yes	No

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional applications(s) listed below.

(Application Number)	(Filing Date)
(Application Number)	(Filing Date)

All Foreign Applications, if any, for any Patent or Inventor's Certificate Filed More than 12 Months (6 Months for Designs) Prior to the Filing Date of This Application:

Country	Application Number	Date of Filing (Month/Day/Year)
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I hereby claim the benefit under Title 35, United States Code, §120 of any United States and/or PCT application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States and/or PCT application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to the patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

(Application Number)	(Filing Date)	(Status - patented, pending, abandoned)
(Application Number)	(Filing Date)	(Status - patented, pending, abandoned)

I hereby appoint the following attorneys to prosecute this application and/or an international application based on this application and to transact all business in the Patent and Trademark Office connected therewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the attorneys identified below, unless the inventor(s) or assignee provides said attorneys with a written notice to the contrary:

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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